

Applicant: Weadock et al.
Application No.: 09/391,762
Filing Date: September 8, 1999
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Amendments to the Claims:

The listing of claims set forth below will replace all prior versions and listings of claims in the application.

Listing of Claims:

Claim 1. (currently amended): An implantable member for use in repair or replacement ~~with~~ within a body comprising an expanded polytetrafluoroethylene substrate having a wall structure including nodes and fibrils with pores present between said nodes and said fibrils, said pores filled with a solid precipitate of ~~collagen~~ a material of natural origin formed *in situ* from a solution ~~and that is pH-adjusted within said pores to a pH of about 7.4.~~

Claim 2. (currently amended): An implantable member of claim 1, wherein said substrate comprises an implantable tubular prosthesis.

Claim 3. (currently amended): An implantable member of claim 1, wherein said substrate comprises an implantable surgical patch.

Claim 4. (currently amended): An implantable member of claim 1, wherein said substrate comprises an implantable mesh.

Claim 5. (currently cancelled)

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Claim 6. (previously cancelled)

Claim 7. (currently amended): An implantable member of claim 1, wherein said ~~collagen~~ material of natural origin is selected from the group consisting of collagen I-V, gelatin, vitronectin, fibronectin, laminin, reconstituted basement membrane matrices, and derivatives and mixtures thereof.

Claim 8. (previously cancelled)

Claim 9. (currently amended): The prosthesis of claim 1, wherein the ~~collagen precipitate~~ includes comprises a pharmacological agent.

Claim 10. (currently amended): The prosthesis of claim 9, wherein said pharmacologically ~~active~~ agent is selected from the group consisting of antimicrobials, antivirals, antibiotics, growth factors, blood clotting modulators, antivirals and mixtures thereof.

Claim 11. (currently amended): The prosthesis of claim 1, wherein the polytetrafluoroethylene has been modified to enhance its hydrophilic character.

Claim 12. (currently amended): The prosthesis of claim 11, wherein the polytetrafluoroethylene has been subjected to glow discharge plasma deposition.

Claim 13. (currently amended): An implantable prosthesis comprising a body of expanded polytetrafluoroethylene having a structure of spaced apart nodes interconnected by fibrils with pores present between said nodes and said fibrils; ~~and~~ wherein a solution of a biodegradable composition having an acidic pH of natural origin is contained within said pores, said biodegradable composition forming a precipitate that substantially fills said pores at selected conditions of temperature and pH to form an insoluble substrate site for cellular attachment.

Claim 14. (currently amended): An implantable prosthesis of claim 13, wherein said biodegradable composition ~~includes~~ comprises at least one extracellular matrix proteins or gelatins.

Claim 15. (currently amended): An implantable prosthesis of claim 14, wherein said ~~composition~~ extracellular matrix protein or gelatin is selected from the group consisting of collagen I, collagen II, collagen III, collagen IV, collagen V, gelatin, vitronectin, fibronectin, laminin, reconstituted basement membrane matrices and derivatives and mixtures thereof.

Claim 16. (currently amended): An implantable prosthesis of claim 14, wherein said extracellular matrix protein ~~comprises~~ collagen.

Claim 17. (currently amended): An implantable prosthesis of claim 14, wherein said composition ~~includes~~ further comprises a buffered phosphate.

Claim 18. (currently amended): An implantable prosthesis of claim 17, wherein said buffered phosphate is maintained at a pH of about 7.4.

Claim 19. (currently amended): An implantable prosthesis of claim 13, wherein the biodegradable composition ~~includes~~ further comprises a pharmacological agent.

Claim 20. (currently amended): An implantable prosthesis of claim 19, wherein said pharmacological agent is selected from the group consisting of antimicrobials, antivirals, antibiotics, growth factors, blood clotting modulators, antivirals and mixtures thereof.

Claim 21. (new): An implantable member for use in repair or replacement within a body comprising an expanded polytetrafluoroethylene substrate having a wall structure including nodes and fibrils with pores present between said nodes and said fibrils, said pores substantially filled with a solid precipitate of a material of natural origin formed *in situ* from a solution that is pH-adjusted within said pores.

Claim 22. (new): The implantable member of claim 1, wherein the solution has an acidic pH.

Claim 23. (new): The implantable member of claim 22, wherein the solution has a pH from about 2 to about 4.

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Claim 24. (new): The implantable member of claim 21, wherein the solution has an acidic pH.

Claim 25. (new): The implantable member of claim 24, wherein the solution has a pH from about 2 to about 4.

Claim 26. (new): The implantable member of claim 1, wherein the solution is pH-adjusted to a pH of about 7.4.

Claim 27. (new): The implantable member of claim 21, wherein the solution is pH-adjusted to a pH of about 7.4.

Claim 28. (new): The implantable prosthesis of claim 13, wherein the solution is pH-adjusted to a pH of about 7.4.

Claim 29. (new): An intermediate implantable member for use in repair or replacement within a body comprising an expanded polytetrafluoroethylene substrate having a wall structure including nodes and fibrils, with pores present between said nodes and said fibrils, said pores filled with an acidic fluid.

Claim 30. (new): The implantable member of claim 29, wherein the fluid is capable of forming a solid precipitate.

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Claim 31. (new): The implantable member of claim 30, wherein the fluid solidifies and is crosslinked to form a solid precipitate of an insoluble, biocompatible, biodegradable material of natural origin.